LAS **Liquid Analysis Systems**

L300 pH
At Line pH Monitor

The Liquid Analysis Systems' L300 pH monitor performs fully automated pH calibration and measurement of single or multiple process streams. Measurements are performed within the L300 unit, not in the process tank or pipe, providing fully automated probe calibration and cleaning, extending probe life many fold, and permitting additional (optional) sample preparation steps. This accomplishes complete automation at minimum operating cost with long-term reliability.

L300 Series Features

- Sensor performance monitoring
- Reading stability and range alarms
- Reagent supply alarms
- Output options for recording, alarming, dosing, and/or replenishing

Through its display and keypad, users can view process status and history, and modify analysis intervals and other configuration parameters. Additionally, the user has the capability to operate hardware and to monitor operations. This series offers a variety of hardware options for stream selection, sample preparation, and sample/reagent delivery.

Series Options

- Multi-stream analysis
- Auto sample retrieval from non-pressurized sources
- Grab sample port
- Sample temperature control
- Sensor and system reagent cleaning
- Filter auto-backflush
- RS 485/Ethernet networking or current loop outputs
- Replenishment and dosing systems

L300 pH Monitor

The L300 pH selects sample from one or more sample streams. Sample can either be pressurized for flow-thru analysis or optionally drawn into the L300. Each reading is replicated for accuracy and reliability. Sample typically is rinsed and purged from the system after each set of readings. Temperature correction, temperature control, sample conditioning, and/or reagent cleaning are also performed, as specified. For process-

specific performance, configurable settings include sampling interval, sample flow time, immersion time, stirring rate, minimum reading stability and repeatability, and solution temperature coefficient(s).

L300 pH Base Model	
L300 pH	Base model in windowed fiberglass enclosure with single sample inlet, two pH buffer channels, pH measurement cell with pH and temperature sensors, magnetic stirrer, and rinse/purge system.

Options	
AB	Sample strainer with automatic back flush
DI	Digital input for remote enable of analyses or dosing
ES	Ethernet server for remote operation
GS	Auto grab sample capability. Sipper tube inlet.
RPSn	Replenishment pump (Solenoid, Burette, or Pneumatic options)
SAn	Stream addition, n = number of streams.
SD	Sample drawing system: for non-pressurized sample
SK	Spares kit (standard and extended versions available)

Specifications	
Range	Configurable over 2 to 12 pH range
Accuracy	Standard: ±0.02 pH
Resolution	Standard: ±0.01 pH
Cycle time	5 minutes per stream, typical
Calibration	Two point, automatic with settable interval
Acid fluorides	Consult factory if present
Sample streams	Standard: 1 Optional: up to 5
Sample conditions	Standard: 3 to 30 psig, < 30 μm particulate, 10 to 60 °C
Sample connection	$^1/_4$" NPT-F
Display/Touchscreen	3" x 2.2", LCD with backlight
Enclosure	20" H x 18" W x 10" D, wall mount, NEMA 4X/IP66, fiberglass
Maintenance alarm	Provided on panel. Relay output optional.
Signal outputs	Relay, current loop, etc., per user requirement
Network output	Ethernet, RS485, or RS-232
Power	100 to 240 VAC, 50 or 60 Hz
Water	≥25 psi, purified.
Air	≥65 psi, oil-free, filtered
Drain	½" NPT-F, vented or unpressurized

Specifications may depend on sample conditions and are subject to change by LAS.